

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 180656

TO: Andrew D Kosar Location: 3c04 / 3c18 Tuesday, March 14, 2006

Art Unit: 1654

Phone: 571-272-0913

Serial Number: 10 / 019786

From: Jan Delaval

Location: Biotech-Chem Library

Remsen 1a51

Phone: 571-272-2504

jan.delaval@uspto.gov

Search Notes

Andrew -

The library never received rush authorization for your search request(s).

Jan



180161

STIC-Biotech/ChemLib		
ANDREW KOSAR [andrew.kosar@uspto.gov] Monday, February 27, 2006 12:30 PM o: STIC-Biotech/ChemLib Database Search Request, Serial Number: 10/109,786		
10/019786		
Requester: ANDREW KOSAR (P/1654) Art Unit: GROUP ART UNIT 1654 Employee Number: 80341 Office Location: REM 03C04 Phone Number: (571)272-0913 Mailbox Number: REM 3c04		
Case serial number: 10/109,786 Class 7 Subclass(es):		
Earliest Priority Filing Date:		
Format preferred for results: Paper Search Topic Information: Please search: A sustained release composition comprising: A) a pharmacologically active substance or its salt, B) a hydroxynaphthoic acid or its salt, and B) a lactic acid-glycolic acid polymer or its salt		
Special Instructions and Other Comments: Rush search approved. Please forward as necessary to STIC. Christopher Low SPE 1614 / TCAR 1600 REM 3E88 / (571) 272-0951		

************ *** ****
Searcher:
Searcher Phone:
Date Searcher Picked up: 314(04
Date completed: 3 Lylow
Searcher Prep Time:
Online Time: ~~(7)

******	*****
Type o	f Search
NA#	AA#:
S/L: Oli	gomer:
Encode/Trans	l:/
Structure #:	Text:
Inventor:	_ Litigation:

Vendors and cost where applicable STN:

DIALOG:
QUESTEL/ORBIT:
LEXIS/NEXIS: SEQUENCE SYSTEM:_ WWW/Internet:___ Other (Specify):_

=> fil reg FILE 'REGISTRY' ENTERED AT 07:18:19 ON 14 MAR 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 MAR 2006 HIGHEST RN 876514-29-3 DICTIONARY FILE UPDATES: 12 MAR 2006 HIGHEST RN 876514-29-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d 175 ide can tot

L75 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN RN **30440-92-7** REGISTRY ED Entered STN: 16 Nov 1984 Naphthalenecarboxylic acid, hydroxy- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: Naphthoic acid, hydroxy- (7CI) OTHER NAMES: CN Hydroxynaphthoic acid MF C11 H8 O3 CI IDS, COM LC STN Files: AGRICOLA, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, CIN, PIRA, PROMT, TOXCENTER, USPATFULL Other Sources: EINECS**

(**Enter CHEMLIST File for up-to-date regulatory information)

D1-OH

D1-C02H

```
71 REFERENCES IN FILE CA (1907 TO DATE)
              14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
              71 REFERENCES IN FILE CAPLUS (1907 TO DATE)
               6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
REFERENCE
            1: 143:163081
REFERENCE
            2:
                141:197401
REFERENCE
            3:
                140:363026
REFERENCE
                140:303407
            4:
REFERENCE
            5:
                137:294769
REFERENCE
            6:
                134:305328
REFERENCE
                134:140601
            7:
REFERENCE
            8:
                134:120954
            9:
REFERENCE
                131:250398
REFERENCE 10: 131:106841
L75 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     18396-51-5 REGISTRY
ED
     Entered STN: 16 Nov 1984
CN
     2-Naphthalenecarboxylic acid, 1-hydroxy-, monosodium salt (9CI) (CA INDEX
     NAME)
OTHER CA INDEX NAMES:
     2-Naphthoic acid, 1-hydroxy-, monosodium salt (8CI)
OTHER NAMES:
CN
     1-Hydroxy-2-naphthalenecarboxylic acid sodium salt
CN
     1-Hydroxy-2-naphthoic acid sodium salt
CN
     Sodium 1-hydroxy-2-naphthoate
CN
     Sodium 1-hydroxynaphthalene-2-carboxylate
MF
     C11 H8 O3 . Na
LC
                  BEILSTEIN*, CA, CAPLUS, DETHERM*, TOXCENTER, USPATFULL
         (*File contains numerically searchable property data)
CRN
    (86 - 48 - 6)
```

23 REFERENCES IN FILE CA (1907 TO DATE)

```
ОН СО2Н
```

Na

```
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
              23 REFERENCES IN FILE CAPLUS (1907 TO DATE)
REFERENCE
            1: 142:183474
REFERENCE
            2.
                142:183473
REFERENCE
            ₹.
                139:110465
REFERENCE
                134:260381
            4:
REFERENCE
            5:
                132:93411
REFERENCE
            6:
                131:246806
REFERENCE
                128:243950
            7 .
REFERENCE
                126:277547
            8:
REFERENCE
            9:
                120:105457
REFERENCE 10: 119:225687
L75 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     14206-62-3 REGISTRY
ED
     Entered STN: 16 Nov 1984
     2-Naphthalenecarboxylic acid, 3-hydroxy-, monosodium salt (9CI) (CA INDEX
     NAME)
OTHER CA INDEX NAMES:
     2-Naphthoic acid, 3-hydroxy-, monosodium salt (8CI)
OTHER NAMES:
CN
     3-Hydroxy-2-naphthalenecarboxylic acid sodium salt
CN
     3-Hydroxy-2-naphthoic acid sodium salt
CN
     Sodium 2-hydroxy-3-naphthoate
CN
     Sodium 3-hydroxy-2-naphthalenecarboxylate
CN
     Sodium 3-hydroxy-2-naphthoate
DR
     94413-59-9
MF
     C11 H8 O3 . Na
CI
LC
     STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM,
       DETHERM*, IFICDB, IFIPAT, IFIUDB, PS, TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
                      EINECS**, NDSL**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
CRN
     (92 - 70 - 6)
```

Na

```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
```

```
76 REFERENCES IN FILE CA (1907 TO DATE)
```

- 5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 76 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
1: 144:53397
REFERENCE
REFERENCE
                144:8410
            2:
REFERENCE
            ₹.
                142:183474
                142:183473
REFERENCE
            4:
REFERENCE
            5:
                142:179460
REFERENCE
            6:
                140:359321
REFERENCE
                139:272638
            7:
REFERENCE
            8:
                138:407241
REFERENCE
            9:
                138:339985
REFERENCE 10: 137:206536
L75 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     92-70-6 REGISTRY
ED
     Entered STN: 16 Nov 1984
     2-Naphthalenecarboxylic acid, 3-hydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     2-Naphthoic acid, 3-hydroxy- (8CI)
OTHER NAMES:
CN
     \beta-Hydroxy-3-naphthoic acid
     β-Hydroxynaphthoic acid
CN
CN
     β-Oxynaphthoic acid
CN
     2-Hydroxy-3-carboxynaphthalene
     2-Hydroxy-3-naphthalenecarboxylic acid
CN
     2-Hydroxy-3-naphthoic acid
CN
CN
     2-Hydroxyl-3-naphthoic acid
CN
     2-Naphthol-3-carboxylic acid
CN
     3-Carboxy-2-naphthol
CN
     3-Hydroxy-\beta-naphthoic acid
CN
     3-Hydroxy-2-naphthalenecarboxylic acid
CN
     3-Hydroxy-2-naphthoic acid
```

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kosar - 10 / 019786
CN
     3-Naphthol-2-carboxylic acid
CN
     BON
CN
     BON acid
CN
     BONA
     C.I. Developer 20
CN
CN
     Developer BON
CN
     Miketazol Developer ONS
CN
     Naphthol B.O.N.
CN
     NSC 3719
FS
     3D CONCORD
     12235-60-8, 12235-61-9
DR
MF
     C11 H8 O3
CI
     COM
LC
     STN Files:
                  ANABSTR, BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT,
       CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, GMELIN*, HSDB*, IFICDB,
       IFIPAT, IFIUDB, IPA, MRCK*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*,
       SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
                      DSL**, EINECS**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
            CO2H
            OH
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            1360 REFERENCES IN FILE CA (1907 TO DATE)
             137 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
```

1360 REFERENCES IN FILE CAPLUS (1907 TO DATE) 25 REFERENCES IN FILE CAOLD (PRIOR TO 1967) REFERENCE 1: 144:150646 REFERENCE 2: 144:141290 REFERENCE 3: 144:128693 REFERENCE 4: 144:117639 REFERENCE 5: 144:116710 REFERENCE 6: 144:95495 REFERENCE 7: 144:80168 REFERENCE 8: 144:26542 REFERENCE 9: 144:24061 REFERENCE 10: 143:487405 L75 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN RN **86-48-6** REGISTRY ED Entered STN: 16 Nov 1984

2-Naphthalenecarboxylic acid, 1-hydroxy- (9CI) (CA INDEX NAME)

CN

```
OTHER CA INDEX NAMES:
     2-Naphthoic acid, 1-hydroxy- (8CI)
OTHER NAMES:
CN
     1-Hydroxy-2-naphthalenecarboxylic acid
CN
     1-Hydroxy-2-naphthoic acid
CN
     1-Naphthol-2-carboxylic acid
CN
     2-Carboxy-1-naphthol
CN
     NSC 3717
     3D CONCORD
FS
MF
     C11 H8 O3
CI
     COM
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD,
LC
     STN Files:
       CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, EMBASE,
       IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, SPECINFO,
       TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
```

DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

Other Sources:

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

640 REFERENCES IN FILE CA (1907 TO DATE)
49 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
640 REFERENCES IN FILE CAPLUS (1907 TO DATE)
14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:116710 144:24061 REFERENCE 2: REFERENCE 144:22659 3: REFERENCE 4: 143:460276 REFERENCE 5: 143:460093 REFERENCE 6: 143:402347 REFERENCE 7: 143:373312 REFERENCE 8: 143:260403 REFERENCE 143:236287 9: REFERENCE 10: 143:229808

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L76 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2006 ACS on STN

```
34346-01-5 REGISTRY
RN
     Entered STN: 16 Nov 1984
ED
     Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI)
                                                                         (CA
     INDEX NAME)
OTHER CA INDEX NAMES:
     Acetic acid, hydroxy-, polymer with 2-hydroxypropanoic acid (9CI)
OTHER NAMES:
CN
     (±)-2-Hydroxypropanoic acid-hydroxyacetic acid copolymer
CN
     Alzamer Depot
CN
     DL-Lactic acid-glycolic acid copolymer
     dl-Lactic acid-glycolic acid copolymer
CN
CN
     dl-Lactic acid-glycolic acid polymer
CN
     GC-Membrane
CN
     Glycolic acid-DL-lactic acid copolymer
CN
     Glycolic acid-dl-lactic acid copolymer
CN
     Glycolic acid-lactic acid copolymer
CN
     Glycolic acid-lactic acid polymer
CN
     Hydroxyacetic acid-(±)-2-hydroxypropanoic acid copolymer
CN
     Hydroxyacetic acid-2-hydroxypropionic acid copolymer
CN
     Hydroxyacetic acid-lactic acid copolymer
CN
     Lactic acid-glycolic acid copolymer
CN
     Lactic acid-glycolic acid polymer
CN
     PLGA 5010
CN
     PLGA 5020
CN
     PLGA 75-65
CN
     PLGA 7510
CN
     PLGA 7520
CN
     Poly(DL-lactic acid-glycolic acid)
CN
     Poly(glycolic acid-co-DL-lactic acid)
CN
     Poly(glycolic acid-lactic acid)
CN
     Poly(lactic acid-glycolic acid)
CN
     Resolut
CN
    Resolut LT
CN
    Resolut ST
CN
     Resomer RG 858
     59199-59-6, 66327-52-4, 153439-97-5, 265647-91-4
DR
MF
     (C3 H6 O3 . C2 H4 O3) x
CI
     PMS, COM
     Polyester, Polyester formed
PCT
LC
     STN Files: AGRICOLA, BIOSIS, BIOTECHNO, CA, CAPLUS, CIN, CSCHEM, EMBASE,
       IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, PATDPASPC, TOXCENTER, TULSA,
       USPAT2, USPATFULL
     CM
          1
     CRN 79-14-1
     CMF C2 H4 O3
HO-C-CH2-OH
     CM
     CRN 50-21-5
     CMF C3 H6 O3
```

```
ОН
|
ме-СН-СО2Н
```

```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
```

```
2234 REFERENCES IN FILE CA (1907 TO DATE)
46 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2240 REFERENCES IN FILE CAPLUS (1907 TO DATE)
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```
REFERENCE
            1: 144:219215
REFERENCE
                144:219195
            2:
REFERENCE
                144:219117
            3:
REFERENCE
            4 :
                144:219116
REFERENCE
                144:219101
            5 .
REFERENCE
            6.
                144:218946
REFERENCE
            7:
                144:205768
REFERENCE
            8:
                144:199034
REFERENCE
            9:
                144:199013
REFERENCE 10: 144:198677
L76 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     26780-50-7 REGISTRY
ED
     Entered STN: 16 Nov 1984
CN
     1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxane-2,5-dione
            (CA INDEX NAME)
     (9CI)
OTHER CA INDEX NAMES:
     1,4-Dioxane-2,5-dione, polymer with 3,6-dimethyl-1,4-dioxane-2,5-dione
     (9CI)
CN
     p-Dioxane-2,5-dione, 3,6-dimethyl-, polyester with p-dioxane-2,5-dione
     (8CI)
CN
     p-Dioxane-2,5-dione, polyester with 3,6-dimethyl-p-dioxane-2,5-dione (8CI)
OTHER NAMES:
CN
     1,4-Dioxane-2,5-dione-1-DL-3,6-dimethyl-1,4-dioxane-2,5-dione copolymer
CN
     3,6-Dimethyl-1,4-dioxane-2,5-dione-1,4-dioxane-2,5-dione copolymer
CN
     Atrigel
CN
     Diglycolide-DL-dilactide copolymer
CN
     DL-Lactide-glycolide copolymer
CN
     Ethicon W 9045
```

CN Glycolide-dl-lactide copolymer

CN Glycolide-DL-lactide copolymer CN Glycolide-DL-lactide polymer

CN Glycolide-lactide copolymer

CN Glycolide-lactide polymer

CN Lactel BP 0100

CN Lactide-diglycolide copolymer CN Lactide-glycolide copolymer

CN Medisorb

```
Medisorb (polymer)
CN
     Medisorb 5050DL
CN
     Medisorb 5050DL High IV
CN
     Medisorb 5050DL-PLG2A
CN
     Medisorb 5050DL-PLG4A
CN
     Medisorb 5050DL-PLG5A
CN
     Medisorb 5050DL2A
CN
CN
     Medisorb 7525DL
     Medisorb 7525DL High IV
CN
CN
     Medisorb 8515DL
     Medisorb 8515DL-PLG6A
CN
     Medisorb 8515DLC01
CN
CN
CN
     Poly(dl-lactide-co-glycolide)
CN
     Poly(DL-lactide-glycolide)
CN
     Poly(glycolide-co-lactide)
CN
     Poly(glycolide-lactide)
CN
     Poly(lactide-co-glycolide)
CN
     Poly-(DL)-lactide-co-glycolide
CN
     Polyglactin
CN
     Polyglactin 370
CN
     Polyglactin 910
CN
     Purac PDLG
CN
     Purasorb PDLG
CN
    Purasorb PLGA
CN
    Resomer 502H
CN
    Resomer 503
CN
    Resomer R 6-503
CN
     Resomer RG 206
CN
     Resomer RG 501H
CN
     Resomer RG 502
     Resomer RG 502H
CN
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
DR
     130953-65-0, 119652-89-0, 31213-75-9, 107760-14-5, 339986-68-4,
     444725-05-7, 460731-87-7
MF
     (C6 H8 O4 . C4 H4 O4)x
CI
     PMS, COM
PCT
     Polyester, Polyester formed
LC
     STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CAPLUS,
       CHEMCATS, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT,
       IFIUDB, IPA, NIOSHTIC, PIRA, PROMT, TOXCENTER, USAN, USPATZ, USPATFULL
     CM
          1
     CRN
         502-97-6
     CMF
         C4 H4 O4
     CM
          2
     CRN
         95-96-5
```

C6 H8 O4

CMF

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3547 REFERENCES IN FILE CA (1907 TO DATE)
65 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3570 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 144:219378

REFERENCE 2: 144:219353

REFERENCE 3: 144:219092

REFERENCE 4: 144:219040

REFERENCE 5: 144:218975

REFERENCE 6: 144:218971

REFERENCE 7: 144:218967

REFERENCE 8: 144:218966

REFERENCE 9: 144:218957

REFERENCE 10: 144:218950

=> fil hcaplus

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FILE COVERS 1907 - 14 Mar 2006 VOL 144 ISS 12 FILE LAST UPDATED: 13 Mar 2006 (20060313/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> d all hitstr tot 173
L73 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN
ΑN
    2005:99313 HCAPLUS
DN
    142:183474
ED
    Entered STN: 04 Feb 2005
ΤТ
    Controlled release pharmaceutical compositions containing polymers
IN
    Cook, Gary P.
PA
    PR Pharmaceuticals, USA
SO
    PCT Int. Appl., 46 pp.
    CODEN: PIXXD2
DΤ
    Patent
LA
    English
IC
    ICM A61K
CC
    63-6 (Pharmaceuticals)
FAN.CNT 1
                       KIND DATE APPLICATION NO.
    PATENT NO.
                                                               DATE
    -----
                       ----
                              -----
                                          -----
                                                                _____
    WO 2005009357
PΙ
                       A2
                              20050203 WO 2004-US22817
                                                                20040715
    WO 2005009357
                        A3
                             20051124
           AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, US
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
            SN, TD, TG
PRAI US 2003-489402P
                         Р
                               20030723
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
PATENT NO.
                ----
                      ______
 -----
WO 2005009357
                ICM
                      A61K
                IPCI
                      A61K [ICM,7]; A61K0009-14 [ICS,7]; A61K0009-16 [ICS,7]
                IPCR
                      A61K [I,S]
AB
    The compns. disclosed herein are for use as controlled release
    therapeutics for the treatment of a wide variety of diseases. In
    particular, the compns. provide water-soluble bioactive agents, organic ions
and
    polymers where the bioactive agent is efficiently released over time with
    minimal degradation products. The resulting controlled release composition is
    capable of administration in a decreased dose volume due to the high drug
    content and predominance of non-degraded bioactive agent after release.
    Addnl., the compns., of the present invention are capable of long term
    sustained release. Thus, octreotide acetate was encapsulated in PLGA
    polymer to give the microparticles.
ST
    controlled release pharmaceutical polymer
IT
    Polyesters, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (caprolactone-based; controlled release pharmaceutical compns. containing
       polymers)
IT
    Antihistamines
```

```
Antitumor agents
     Antiulcer agents
     Asthma
     Bronchodilators
     Cardiovascular agents
     Cardiovascular system, disease
     Dissolution
     Drug bioavailability
     Neoplasm
     Nervous system, disease
     Nervous system agents
     Opioid antagonists
     Particle size distribution
     Ulcer
     Vasodilators
        (controlled release pharmaceutical compns. containing polymers)
TΤ
    Antigens
     Carbohydrates, biological studies
     Hormones, animal, biological studies
     Nucleic acids
     Peptides, biological studies
     Polyanhydrides
     Polycarbonates, biological studies
     Polyesters, biological studies
     Polymer blends
     Polymers, biological studies
     Polyoxyalkylenes, biological studies
     Polyoxymethylenes, biological studies
     Polyurethanes, biological studies
     Proteins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (controlled release pharmaceutical compns. containing polymers)
ΙT
     Drug delivery systems
        (controlled-release; controlled release pharmaceutical compns. containing
        polymers)
TΤ
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (dilactone-based; controlled release pharmaceutical compns. containing
        polymers)
IT
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (glycolide-based; controlled release pharmaceutical compns. containing
        polymers)
IT
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (hydroxycarboxylic acid-based; controlled release pharmaceutical
        compns. containing polymers)
IT
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (lactic acid-based; controlled release pharmaceutical compns. containing
        polymers)
TΤ
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (lactide; controlled release pharmaceutical compns. containing polymers)
IΤ
     Encapsulation
        (microencapsulation; controlled release pharmaceutical compns. containing
        polymers)
IT
     Drug delivery systems
        (microparticles; controlled release pharmaceutical compns. containing
        polymers)
```

```
IΤ
     Polyethers, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (ortho ester group-containing; controlled release pharmaceutical compns.
        containing polymers)
ΙT
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyamide-; controlled release pharmaceutical compns. containing polymers)
IT
     Polyamides, biological studies
     Polyethers, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyester-; controlled release pharmaceutical compns. containing polymers)
IT
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyether-; controlled release pharmaceutical compns. containing polymers)
IΤ
     9034-40-6, LHRH
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (agonists; controlled release pharmaceutical compns. containing polymers)
IT
     79517-01-4, Octreotide acetate
     RL: PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (controlled release pharmaceutical compns. containing polymers)
ΙT
     6640-22-8, Sodium pamoate
     RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT
     (Reactant or reagent); USES (Uses)
        (controlled release pharmaceutical compns. containing polymers)
IT
     135467-16-2P
                    834894-41-6P
                                   834894-42-7P
                                                 834894-79-0P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (controlled release pharmaceutical compns. containing polymers)
IT
     50-56-6, Oxytocin, biological studies
                                             54-21-7, Sodium salicylate
     361-09-1, Sodium cholate
                              532-02-5, Sodium 2-naphthalenesulfonate
               6233-83-6, Oxytocin acetate
                                              9004-10-8, Insulin, biological
     studies 14047-56-4 14206-62-3, Sodium 3-hydroxy-2-
     naphthoate
                 17273-79-9, Sodium 2-naphthoate 18396-51-5,
     Sodium 1-hydroxy-2-naphthoate
                                    23520-54-9, Sodium
     salicylsalicylate 24980-41-4, Polycaprolactone
                       25322-68-3D, Polyethylene glycol, copolymers
     Polycaprolactone
     25832-58-0, Trifluoromethyl p-toluic acid sodium salt
                                                             26009-03-0,
     Polyglycolide
                    26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)]
     26100-51-6, Poly(lactic acid) 26124-68-5, Poly(glycolic acid)
     26202-08-4, Polyglycolide 26680-10-4, Polylactide 26780-50-7,
     Glycolide-lactide copolymer 29223-92-5
                                                31621-87-1,
     Polydioxanone 34346-01-5, Glycolic acid-lactic
     acid copolymer
                     51110-01-1, Somatostatin
                                                 53714-56-0, Leuprolide
     74381-53-6, Leuprolide acetate 834894-43-8, Sodium 2,3-
     naphthalenedicarboxylate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (controlled release pharmaceutical compns. containing polymers)
     14206-62-3, Sodium 3-hydroxy-2-naphthoate
     18396-51-5, Sodium 1-hydroxy-2-naphthoate
     26780-50-7, Glycolide-lactide copolymer
     34346-01-5, Glycolic acid-lactic acid
     copolymer
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (controlled release pharmaceutical compns. containing polymers)
RN
     14206-62-3 HCAPLUS
     2-Naphthalenecarboxylic acid, 3-hydroxy-, monosodium salt (9CI) (CA INDEX
CN
```

NAME)

Na

RN 18396-51-5 HCAPLUS

CN 2-Naphthalenecarboxylic acid, 1-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 26780-50-7 HCAPLUS

CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxane-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 502-97-6 CMF C4 H4 O4

CM 2

CRN 95-96-5 CMF C6 H8 O4

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RN
     34346-01-5 HCAPLUS
CN
     Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI)
     INDEX NAME)
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          1
     CRN 79-14-1
     CMF C2 H4 O3
   0
HO-C-CH2-OH
     CM
          2
     CRN 50-21-5
     CMF C3 H6 O3
   ОН
Me-CH-CO2H
L73 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     2005:99312 HCAPLUS
     142:183473
DN
ED
     Entered STN: 04 Feb 2005
ΤI
     Preparation of controlled release pharmaceutical formulations containing
     polymers
ΙN
     Gary, P. Cook
PA
     PR Pharmaceuticals, USA
SO
     PCT Int. Appl., 50 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K
CC
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 1
FAN.CNT 1
     PATENT NO.
                        KIND
                               DATE
                                           APPLICATION NO.
                                                                  DATE
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ΡI
     WO 2005009356
                         A2
                               20050203
                                           WO 2004-US22816
                                                                  20040715
     WO 2005009356
                         A3
                               20050609
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
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PRAI US 2003-487663P
                         Ρ
                               20030715
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
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 WO 2005009356
                ICM
                       A61K
                IPCI
                       A61K [ICM, 7]
                IPCR
                       A61F0002-02 [I,A]; A61F0002-02 [I,C]; A61K [I,S];
                       A61K0009-50 [I,A]; A61K0009-50 [I,C]; A61K0047-30
                        [I,A]; A61K0047-30 [I,C]
    The methods disclosed herein are of use for the production of controlled
AB
    release compns. In particular, the methods provide the contacting of an
    organic phase containing a bioactive agent and a polymer with an aqueous phase
containing
    an organic ion to create controlled release compns. containing bioactive
agents.
    The present invention also includes controlled release compns. including a
    polymer, an organic ion and a bioactive agent. The present invention also
    includes methods of using such controlled release compns. The usefulness
    of the present invention is that the methods result in the production of
    controlled release compns. containing bioactive agent capable of
    administration in a concentrated low-dose form, having low burst and reduced
    production of degraded bioactive agent. Thus, octreotide acetate was
    encapsulated in PLGA polymer to give the microparticles.
ST
    controlled release pharmaceutical polymer
ΙT
    Polyesters, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (caprolactone-based; preparation of controlled release pharmaceutical
        formulations containing polymers)
IT
    Drug delivery systems
        (controlled-release; preparation of controlled release pharmaceutical
        formulations containing polymers)
IT
    Solvents
        (cosolvents; preparation of controlled release pharmaceutical formulations
        containing polymers)
ΙT
    Polyesters, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (dilactone-based; preparation of controlled release pharmaceutical
        formulations containing polymers)
ΙT
    Polyesters, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (glycolide-based; preparation of controlled release pharmaceutical
        formulations containing polymers)
IT
    Polyesters, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (hydroxycarboxylic acid-based; preparation of controlled release
       pharmaceutical formulations containing polymers)
IΤ
    Polyesters, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (lactic acid-based; preparation of controlled release pharmaceutical
        formulations containing polymers)
IT
    Polyesters, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (lactide; preparation of controlled release pharmaceutical formulations
       containing polymers)
IT
    Encapsulation
        (microencapsulation; preparation of controlled release pharmaceutical
        formulations containing polymers)
IT
    Drug delivery systems
        (microparticles; preparation of controlled release pharmaceutical
```

formulations containing polymers)

```
Drug delivery systems
IT
        (nanoparticles; preparation of controlled release pharmaceutical
        formulations containing polymers)
IT
     Polyethers, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (ortho ester group-containing; preparation of controlled release
pharmaceutical
        formulations containing polymers)
IT
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyamide-; preparation of controlled release pharmaceutical formulations
        containing polymers)
IT
     Polyamides, biological studies
     Polyethers, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyester-; preparation of controlled release pharmaceutical formulations
        containing polymers)
ፐጥ
     Polyesters, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polyether-; preparation of controlled release pharmaceutical formulations
        containing polymers)
IT
    Antihistamines
    Antitumor agents
    Antiulcer agents
    Asthma
     Bronchodilators
     Cardiovascular agents
     Cardiovascular system, disease
     Dissolution
     Drug bioavailability
     Emulsifying agents
    Neoplasm
    Nervous system, disease
     Nervous system agents
     Opioid antagonists
     Particle size distribution
     Ulcer
     Vasodilators
        (preparation of controlled release pharmaceutical formulations containing
        polymers)
IT
     Polyoxyalkylenes, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (preparation of controlled release pharmaceutical formulations containing
        polymers)
IT
    Antigens
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (preparation of controlled release pharmaceutical formulations containing
        polymers)
ΙT
    Carbohydrates, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (preparation of controlled release pharmaceutical formulations containing
        polymers)
TΤ
     Hormones, animal, biological studies ·
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (preparation of controlled release pharmaceutical formulations containing
        polymers)
IT
    Nucleic acids
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (preparation of controlled release pharmaceutical formulations containing
        polymers)
```

IT Peptides, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) IT Polyanhydrides RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) ΙT Polycarbonates, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) IT Polyesters, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) ΙT Polymer blends RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) TΤ Polymers, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) TΨ Polyoxymethylenes, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) ΤТ Polyurethanes, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) TΤ Proteins RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) IT 64-17-5, EtOH, uses 64-19-7, Acetic acid, uses 67-56-1, MeOH, uses 67-63-0, Isopropanol, uses 67-64-1, Acetone, uses 67-68-5, DMSO, uses 75-09-2, Methylene chloride, uses 68-12-2, DMF, uses 100-51-6, Benzyl alcohol, uses 108-32-7, Propylene carbonate 141-78-6, EtOAc, uses 872-50-4, uses 25322-68-3, Polyethylene glycol RL: NUU (Other use, unclassified); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) IT 135467-16-2P 834894-41-6P 834894-42-7P RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) 50-56-6, Oxytocin, biological studies IT 54-21-7, Sodium salicylate 65-85-0, Benzoic acid, biological studies 361-09-1, Sodium cholate 532-32-1, Sodium benzoate 532-02-5, Sodium 2-naphthalenesulfonate 6640-22-8, Disodium pamoate 9002-89-5, Poly(vinyl alcohol) 9002-96-4, Vitamin E TPGS 9004-10-8, Insulin, biological studies 14047-56-4, Sodium succinate 14206-62-3, Sodium 3-hydroxy-2naphthoate 17273-79-9, Sodium 2-naphthoate 18396-51-5, Sodium 1-hydroxy-2-naphthoate 23520-54-9, Sodium 24980-41-4, Polycaprolactone salicylsalicylate 25248-42-4, Polycaprolactone 25322-68-3D, Polyethylene glycol, copolymers

26009-03-0,

25832-58-0, Trifluoromethyl p-toluic acid sodium salt

Polyglycolide 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Poly(lactic acid) 26124-68-5, Polyglycolic acid 26202-08-4, Polyglycolide 26680-10-4, Poly(lactide) 26780-50-7 , Glycolide-lactide copolymer 29223-92-5 31621-87-1, PolyDioxanone 34346-01-5, Glycolic acidlactic acid copolymer 51110-01-1, Somatostatin 53714-56-0, 79517-01-4, Octreotide acetate Leuprolide 83150-76-9, Octreotide 834894-43-8, Sodium 2,3-naphthalenedicarboxylate RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) IT 14206-62-3, Sodium 3-hydroxy-2-naphthoate 18396-51-5, Sodium 1-hydroxy-2-naphthoate 26780-50-7, Glycolide-lactide copolymer 34346-01-5, Glycolic acid-lactic acid copolymer RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of controlled release pharmaceutical formulations containing polymers) RN 14206-62-3 HCAPLUS CN 2-Naphthalenecarboxylic acid, 3-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 18396-51-5 HCAPLUS
CN 2-Naphthalenecarboxylic acid, 1-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)

Na

CMF C4 H4 O4

RN 26780-50-7 HCAPLUS
CN 1,4-Dioxane-2,5-dione, 3,6-dimethyl-, polymer with 1,4-dioxane-2,5-dione (9CI) (CA INDEX NAME)

CM 1

CRN 502-97-6

CM 2

CRN 95-96-5 CMF C6 H8 O4

RN 34346-01-5 HCAPLUS

CN Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI) (CA INDEX NAME)

CM 1

CRN 79-14-1 CMF C2 H4 O3

CM 2

CRN 50-21-5 CMF C3 H6 O3

L73 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:465844 HCAPLUS

DN 137:37675

ED Entered STN: 21 Jun 2002

TI Medicinal compositions of nonpeptidyl gonadotropin-releasing hormone agonist or antagonist, process for producing the same and use thereof IN Suzuki, Hiroshi; Hata, Yoshio

```
PA
     Takeda Chemical Industries, Ltd., Japan
SO
     PCT Int. Appl., 93 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     Japanese
IC
     ICM A61K0045-00
         A61K0031-519; A61K0031-4365; A61K0009-50; A61K0009-52; A61K0047-12;
         A61K0047-34; A61P0034-00; A61P0005-24; A61P0035-04; A61P0013-08;
         A61P0015-00; A61P0017-00; A61P0017-14; A61P0025-28; A61P0015-08;
         A61P0001-00; A61P0015-18; C07D0495-04
CC
    63-6 (Pharmaceuticals)
FAN.CNT 1
    PATENT NO.
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                                         APPLICATION NO.
                                                               DATE
    WO 2002047722 A1 20020620 WO 2001-JP10956 20011214
PΙ
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            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
            UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
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    AU 2002021139
                        Α5
                               20020624
                                        AU 2002-21139
                                                                20011214
    JP 2002326960
                        A2
                               20021115
                                          JP 2001-380955
                                                                20011214
PRAI JP 2000-382431
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                               20001215
    WO 2001-JP10956
                        W
                               20011214
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
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WO 2002047722
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                       A61K0045-00
                       A61K0031-519; A61K0031-4365; A61K0009-50; A61K0009-52;
                ICS
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                       A61P0035-04; A61P0013-08; A61P0015-00; A61P0017-00;
                       A61P0017-14; A61P0025-28; A61P0015-08; A61P0001-00;
                       A61P0015-18; C07D0495-04
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                       A61K0031-4365 [ICS,7]; A61K0009-50 [ICS,7]; A61K0009-52
                       [ICS,7]; A61K0047-12 [ICS,7]; A61K0047-34 [ICS,7];
                       A61P0034-00 [ICS,7]; A61P0005-24 [ICS,7]; A61P0035-04
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                       A61P0017-00 [ICS,7]; A61P0017-14 [ICS,7]; A61P0025-28
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                       A61P0015-18 [ICS,7]; C07D0495-04 [ICS,7]
                IPCR
                       A61K0031-00 [I,A]; A61K0031-00 [I,C]; A61K0031-4353
                       [I,C]; A61K0031-4365 [I,A]; A61K0031-519 [I,A];
                       A61K0031-519 [I,C]; A61K0047-12 [I,A]; A61K0047-12
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                       [I,C]; C07D0471-04 [I,A]; C07D0487-00 [I,C];
                       C07D0487-04 [I,A]; C07D0495-00 [I,C]; C07D0495-04 [I,A]
                ECLA
                       A61K031/00+A; A61K031/4365; A61K031/519; C07D333/38;
                       C07D471/04+221C+209C; C07D471/04+221B+209B;
                       C07D471/04+235C+221C; C07D487/04+239C+209C;
                       C07D487/04+239C+235C; C07D495/04+333B+239B
AU 2002021139
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                       A61K0031-4365 [ICS, 7]; A61K0009-50 [ICS, 7]; A61K0009-52
                       [ICS,7]; A61K0047-12 [ICS,7]; A61K0047-34 [ICS,7];
                       A61P0005-24 [ICS,7]; A61P0035-04 [ICS,7]; A61P0013-08
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[ICS, 7]; A61P0015-00 [ICS, 7]; A61P0017-00 [ICS, 7];
                        A61P0017-14 [ICS,7]; A61P0025-28 [ICS,7]; A61P0015-08
                        [ICS, 7]; A61P0001-00 [ICS, 7]; A61P0015-18 [ICS, 7];
                        C07D0495-04 [ICS,7]
                        A61K0047-34 [ICM,7]; A61K0009-16 [ICS,7]; A61K0031-4365
 JP 2002326960
                 IPCI
                        [ICS, 7]; A61K0031-522 [ICS, 7]; A61K0045-00 [ICS, 7];
                        A61K0047-12 [ICS,7]; A61P0001-00 [ICS,7]; A61P0005-24
                        [ICS, 7]; A61P0013-08 [ICS, 7]; A61P0015-00 [ICS, 7];
                        A61P0015-08 [ICS,7]; A61P0015-18 [ICS,7]; A61P0017-10
                        [ICS, 7]; A61P0017-14 [ICS, 7]; A61P0025-28 [ICS, 7];
                        A61P0035-00 [ICS,7]
OS
    MARPAT 137:37675
AR
     Disclosed are medicinal compns. comprising (i) a nonpeptidyl
     gonadotropin-releasing hormone agonist or antagonist, (ii) an organic acid or
     its salt, and (iii) a biodegradable polymer or its salt. These compns.
     can be efficiently produced, suffer from no trouble in quality control and
     can achieve a stable releasing speed over a long period of time, even in
     case where the nonpeptidyl GnRH agonist or antagonist is contained in a
     large amount regardless of the solubility, m.p. or crystallinity thereof. A
     compound 5-(N-benzyl-N-methylaminomethyl)-1-(2,6-difluorobenzyl)-6-[4-(3-
     methoxy ureide)phenyl]-3-phenylthieno[2,3-d]pyrimidine-2,4-(1H,3H)-dione
     was prepared and dissolved in dichloromethane with 3-hydroxy-2-
     naphthoic acid and polylactic acid. The solution was
     poured in polyvinyl alc. solution, emulsified, and freeze-dried with mannitol
     to obtain a microsphere. The microsphere showed controlled-release of the
     compound when s.c. administered in rats.
ST
     gonadotropin releasing hormone agonist antagonist controlled release
    microsphere
IT
     Ovulation
        (accelerators; medicinal compns. containing nonpeptidic GnRH agonists or
        antagonists, organic acids, and biodegradable polymers)
ΙT
     Carboxylic acids, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aromatic, hydroxy; medicinal compns. containing nonpeptidic GnRH agonists
or
        antagonists, organic acids, and biodegradable polymers)
ΙT
     Prostate gland, disease
        (benign hyperplasia, treatment of; medicinal compns. containing nonpeptidic
        GnRH agonists or antagonists, organic acids, and biodegradable polymers)
ΙT
     Hyperplasia
        (benign prostatic, treatment of; medicinal compns. containing nonpeptidic
        GnRH agonists or antagonists, organic acids, and biodegradable polymers)
ΙT
     Polymers, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (biodegradable; medicinal compns. containing nonpeptidic GnRH agonists or
        antagonists, organic acids, and biodegradable polymers)
ΙT
     Sex hormones
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (disease related, treatment of; medicinal compns. containing nonpeptidic
        GnRH agonists or antagonists, organic acids, and biodegradable polymers)
ΙT
     Uterus, disease
        (endometriosis, treatment of; medicinal compns. containing nonpeptidic GnRH
        agonists or antagonists, organic acids, and biodegradable polymers)
ΙT
     Hair preparations
        (growth stimulants; medicinal compns. containing nonpeptidic GnRH agonists
        or antagonists, organic acids, and biodegradable polymers)
ΙT
     Uterus, disease
        (hysteromyoma, treatment of; medicinal compns. containing nonpeptidic GnRH
        agonists or antagonists, organic acids, and biodegradable polymers)
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IT

Drug delivery systems

(injections, sustained release, microsphere; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Intestine, disease

(irritable bowel syndrome, treatment of; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Polyesters, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (lactic acid-based; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Uterus, neoplasm

(leiomyoma, treatment of; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Anti-Alzheimer's agents

Contraceptives

(medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Drug delivery systems

(microspheres, controlled-release; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Drug delivery systems

(microspheres, sustained-release, injections; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Ovary, disease

(multilocular ovarian syndrome, treatment of; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Puberty

(precocious puberty, treatment of; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Ovarian cycle

(premenstrual syndrome, treatment of; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Reproduction, animal

(regulation of; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Antitumor agents

(sex hormone-related tumor inhibitor; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT Acne

Alopecia

Alzheimer's disease

Amenorrhea

Dysmenorrhea

Sterility

(treatment of; medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT 9034-40-6, Gonadotropin-releasing hormone

RL: BSU (Biological study, unclassified); BIOL (Biological study) (medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

IT 308831-61-0P 392231-14-0P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(medicinal compns. containing nonpeptidic GnRH agonists or antagonists, organic acids, and biodegradable polymers)

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IT
    69-72-7, Salicylic acid, biological studies 86-48-6, 1-
    Hydroxy-2-naphthoic acid 92-70-6, 3-
    Hydroxy-2-naphthoic acid
                                26023-30-3,
    Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)]
                                                26100-51-6, Polylactic acid
    34346-01-5, Lactic acid-glycolic acid
    copolymer
                174072-31-2
                               436805-94-6
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (medicinal compns. containing nonpeptidic GnRH agonists or antagonists,
        organic acids, and biodegradable polymers)
TΤ
    103-67-3, Benzylmethylamine
                                   103-71-9, Phenylisocyanate, reactions
    105-56-6, Ethyl cyano acetate
                                     128-08-5, N-Bromosuccinimide
                                                                     697-73-4,
                                  5332-96-7, 4-Nitrophenylacetone
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        (preparation of nonpeptidic GnRH agonists or antagonists for microsphere
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        (preparation of nonpeptidic GnRH agonists or antagonists for microsphere
        composition containing organic acids and biodegradable polymers)
RE.CNT
             THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Asta Medica Ag; JP 09509145 A 1995
(2) Asta Medica Ag; DE 4342092 A 1995 HCAPLUS
(3) Asta Medica Ag; US 5773032 A 1995 HCAPLUS
(4) Asta Medica Ag; EP 732934 Al 1995 HCAPLUS
(5) Asta Medica Ag; WO 9515767 A1 1995 HCAPLUS
(6) Sandoz Ltd; JP 06340543 A 1994 HCAPLUS
(7) Sandoz Ltd; EP 626170 A2 1994 HCAPLUS
(8) Takeda Chemical Industries Ltd; JP 08295693 A 1995 HCAPLUS
(9) Takeda Chemical Industries Ltd; US 5817819 A 1995 HCAPLUS
(10) Takeda Chemical Industries Ltd; EP 756599 A1 1995 HCAPLUS
(11) Takeda Chemical Industries Ltd; WO 9528405 A1 1995 HCAPLUS
(12) Takeda Chemical Industries Ltd; JP 09169768 A 1996 HCAPLUS
(13) Takeda Chemical Industries Ltd; US 6187788 A 1996 HCAPLUS
(14) Takeda Chemical Industries Ltd; EP 808317 Al 1996 HCAPLUS
(15) Takeda Chemical Industries Ltd; WO 9624597 A1 1996 HCAPLUS
(16) Takeda Chemical Industries Ltd; JP 10273447 A 1998 HCAPLUS
(17) Takeda Chemical Industries Ltd; WO 9832423 A1 1998 HCAPLUS
(18) Takeda Chemical Industries Ltd; EP 1048301 A1 1999 HCAPLUS
(19) Takeda Chemical Industries Ltd; JP 11269094 A 1999 HCAPLUS
(20) Takeda Chemical Industries Ltd; AU 9918897 A 1999 HCAPLUS
(21) Takeda Chemical Industries Ltd; WO 9936099 A1 1999 HCAPLUS
(22) Takeda Chemical Industries Ltd; WO 0056739 A1 2000 HCAPLUS
(23) Takeda Chemical Industries Ltd; EP 1163244 A1 2000 HCAPLUS
(24) Takeda Chemical Industries Ltd; JP 2001278884 A 2000 HCAPLUS
(25) Takeda Chemical Industries Ltd; US 6297379 A 2000 HCAPLUS
(26) Takeda Chemical Industries Ltd; JP 200181043 A 2001
    86-48-6, 1-Hydroxy-2-naphthoic acid
    92-70-6, 3-Hydroxy-2-naphthoic acid
    34346-01-5, Lactic acid-glycolic acid
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    2-Naphthalenecarboxylic acid, 1-hydroxy- (9CI) (CA INDEX NAME)
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RN 92-70-6 HCAPLUS

CN 2-Naphthalenecarboxylic acid, 3-hydroxy- (9CI) (CA INDEX NAME)

RN 34346-01-5 HCAPLUS

CN Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI) (CA INDEX NAME)

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CRN 50-21-5 CMF C3 H6 O3

L73 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:63807 HCAPLUS

DN 134:120954

ED Entered STN: 26 Jan 2001

TI Sustained-release compositions, process for producing the same and use thereof

IN Igari, Yasutaka; Hata, Yoshio; Yamamoto, Kazumichi

PA Takeda Chemical Industries, Ltd., Japan

SO PCT Int. Appl., 49 pp. CODEN: PIXXD2

DT Patent

LA Japanese

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     The invention relates to sustained release compns. containing a physiol.
     active substance or its salt, hydroxynaphthoic acid or
     its salt and a lactic acid-glycolic acid polymer or
     its salt, wherein the product of the weight-average mol. weight of the
     lactic acid-glycolic acid polymer by the amount (<mmol) of
     the terminal carboxyl group per unit mass (g) of the lactic
     acid-glycolic acid polymer is from 1,200,000 to 3,000,000
     (inclusive); and drugs, etc. containing these sustained release compns.
ST
     sustained release hydroxynaphthoic acid glycolic
     copolymer; LHRH deriv sustained release microcapsule
IT
     Drug delivery systems
        (microcapsules, sustained-release; sustained-release compns., process
        for producing the same and use thereof)
IT
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        (sustained-release compns., process for producing the same and use
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ΙT
     Peptides, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
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TT
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     92-70-6, 3-Hydroxy-2-naphthoic acid
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     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
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RE.CNT
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              THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Takeda Chemical Industries Ltd; JP 08259460 A HCAPLUS
(2) Takeda Chemical Industries Ltd; JP 08259460 A HCAPLUS
(3) Takeda Chemical Industries Ltd; JP 10273447 A HCAPLUS
(4) Takeda Chemical Industries Ltd; JP 11269094 A HCAPLUS
(5) Takeda Chemical Industries Ltd; AU 9644591 A HCAPLUS
(6) Takeda Chemical Industries Ltd; AU 9644591 A HCAPLUS
(7) Takeda Chemical Industries Ltd; AU 9856783 A HCAPLUS
(8) Takeda Chemical Industries Ltd; AU 9918897 A HCAPLUS
(9) Takeda Chemical Industries Ltd; WO 9622786 A1 1996 HCAPLUS
(10) Takeda Chemical Industries Ltd: WO 9622786 Al 1996 HCAPLUS
(11) Takeda Chemical Industries Ltd; WO 9832423 A1 1998 HCAPLUS
(12) Takeda Chemical Industries Ltd; WO 9936099 A1 1999 HCAPLUS
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     copolymer
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (sustained-release compns., process for producing the same and use
        thereof)
RN
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CN
     2-Naphthalenecarboxylic acid, 1-hydroxy- (9CI) (CA INDEX NAME)
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RN 92-70-6 HCAPLUS

CN 2-Naphthalenecarboxylic acid, 3-hydroxy- (9CI) (CA INDEX NAME)

RN 30440-92-7 HCAPLUS

CN Naphthalenecarboxylic acid, hydroxy- (9CI) (CA INDEX NAME)

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RN 34346-01-5 HCAPLUS

CN Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI) (CA INDEX NAME)

CM 1

CRN 79-14-1

CMF C2 H4 O3

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CRN 50-21-5 CMF C3 H6 O3

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L73 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2006 ACS on STN
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    Entered STN: 30 Jul 1999
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    Sustained release compositions, process for producing the same and
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    Saikawa, Akira; Igari, Yasutaka; Hata, Yoshio;
    Yamamoto, Kazumichio
PΑ
    Takeda Chemical Industries, Ltd., Japan
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A61K0047-30 [ICM, 6]; A61K0047-12 [ICS, 6]; A61K0037-02

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                        A61K0047-12 [ICM, 7]; A61K0047-30 [ICS, 7]
                 ECLA
                        A61K009/16H6D4; A61K038/09; A61K047/34; A61K047/48H4;
                        A61K047/48H4C
 HR 2000000471
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                        A61K047/48H4C
 US 2005025826
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                        A61K0009-00 [ICM,7]; A61K0009-22 [ICS,7]; A61K0009-50
                        [ICS, 7]; A61K0031-19 [ICS, 7]
                 IPCR
                        A61K0009-16 [I,A]; A61K0009-16 [I,C]; A61K0038-08
                        [I,C]; A61K0038-09 [I,A]; A61K0047-34 [I,A];
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                 ECLA
                        A61K009/16H6D4; A61K038/09; A61K047/34; A61K047/48H4C
OS
     MARPAT 131:106841
AΒ
     The invention relates to sustained release compns. containing a physiol.
```

active substance [peptide A] or its salt, hydroxynaphthoic

```
acid or its salt and a biodegradable polymer or its salt; and
     drugs, etc. containing these compns.
ST
     sustained release capsule peptide A; hydroxynaphthoic
     acid sustained release capsule peptide; biodegradable polymer
    sustained release capsule peptide
IΤ
     Prostate gland
        (benign hyperplasia; sustained release compns., process for producing
        the same and utilization thereof)
IT
     Polymers, biological studies
     RL: PEP (Physical, engineering or chemical process); THU (Therapeutic
     use); BIOL (Biological study); PROC (Process); USES (Uses)
        (biodegradable; sustained release compns., process for producing the
        same and utilization thereof)
IT
     Drug delivery systems
        (capsules, sustained-release; sustained release compns., process for
        producing the same and utilization thereof)
IT
     Development, nonmammalian postembryonic
        (early puberty; sustained release compns., process for producing the
        same and utilization thereof)
IT
     Uterus, disease
        (endometriosis; sustained release compns., process for producing the
        same and utilization thereof)
TΤ
     Drug delivery systems
        (injections, sustained release; sustained release compns., process for
        producing the same and utilization thereof)
TΤ
     Antitumor agents
        (mammary gland; sustained release compns., process for producing the
        same and utilization thereof)
IT
     Uterus, disease
        (metrofibroma; sustained release compns., process for producing the
        same and utilization thereof)
ΙT
     Drug delivery systems
        (microcapsules, sustained-release; sustained release compns., process
        for producing the same and utilization thereof)
ΙT
    Mammary gland
    Mammary gland
     Prostate gland
     Prostate gland
        (neoplasm, inhibitors; sustained release compns., process for producing
        the same and utilization thereof)
TΤ
    Antitumor agents
        (prostate gland; sustained release compns., process for producing the
        same and utilization thereof)
TΤ
     Contraceptives
    Menstrual disorder
        (sustained release compns., process for producing the same and
        utilization thereof)
IΤ
     Drug delivery systems
        (sustained-release; sustained release compns., process for producing
        the same and utilization thereof)
TΤ
     92-70-6, 3-Hydroxy-2-naphthoic acid
     9034-40-6, Lh-rh
                      26100-51-6, DL-Lactic acid polymer 30440-92-7
     , Hydroxynaphthoic acid 34346-01-5,
     Glycolic acid-lactic acid copolymer
                                           88793-81-1
     168395-24-2
                   230638-75-2
     RL: PEP (Physical, engineering or chemical process); THU (Therapeutic
     use); BIOL (Biological study); PROC (Process); USES (Uses)
        (sustained release compns., process for producing the same and
        utilization thereof)
RE.CNT 7
              THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
```

```
RE
(1) Takeda Chemical Industries Ltd; EP 889722 A2 HCAPLUS
(2) Takeda Chemical Industries Ltd; WO 9622786 A1 HCAPLUS
(3) Takeda Chemical Industries Ltd; AU 9644591 A1 HCAPLUS
(4) Takeda Chemical Industries Ltd; AU 9720432 A1 HCAPLUS
(5) Takeda Chemical Industries Ltd; WO 9735563 A2 HCAPLUS
(6) Takeda Chemical Industries Ltd; JP 08259460 A2 1996 HCAPLUS
(7) Takeda Chemical Industries Ltd; JP 09315997 A2 1997 HCAPLUS
     92-70-6, 3-Hydroxy-2-naphthoic acid
     30440-92-7, Hydroxynaphthoic acid
     34346-01-5, Glycolic acid-lactic acid
     copolymer
    RL: PEP (Physical, engineering or chemical process); THU (Therapeutic
    use); BIOL (Biological study); PROC (Process); USES (Uses)
        (sustained release compns., process for producing the same and
        utilization thereof)
     92-70-6 HCAPLUS
RN
CN
     2-Naphthalenecarboxylic acid, 3-hydroxy- (9CI) (CA INDEX NAME)
```

RN 30440-92-7 HCAPLUS CN Naphthalenecarboxylic acid, hydroxy- (9CI) (CA INDEX NAME)

D1-OH

D1-CO2H

RN 34346-01-5 HCAPLUS
CN Propanoic acid, 2-hydroxy-, polymer with hydroxyacetic acid (9CI) (CAINDEX NAME)

CM 1

CRN 79-14-1 CMF C2 H4 O3

CM 2

CRN 50-21-5 CMF C3 H6 O3

OH | Me-CH-CO₂H

=> => fil wpix FILE 'WPIX' ENTERED AT 07:36:46 ON 14 MAR 2006 COPYRIGHT (C) 2006 THE THOMSON CORPORATION

FILE LAST UPDATED: 10 MAR 2006 <20060310/UP>
MOST RECENT DERWENT UPDATE: 200617 <200617/DW>
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http://scientific.thomson.com/support/patents/dwpiref/reftools/classification

>>> PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE http://www.stn-international.de/stndatabases/details/ipc_reform.html and http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf <<< 'BI ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> d l113 all abeq tech abex tot

L113 ANSWER 1 OF 6 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 2005-142542 [15] WPIX

DNC C2005-046378

TI Preparation of controlled release composition by combining an organic phase comprising bioactive agent and polymer with an aqueous phase comprising an organic ion.

DC A28 A96 B07

IN GARY, P C

PA (PRPH-N) PR PHARM

CYC 107

PI WO 2005009356 A2 20050203 (200515)* EN 50 A61K000-00 <--RW: AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE

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            UZ VC VN YU ZA ZM ZW
ADT WO 2005009356 A2 WO 2004-US22816 20040715
PRAI US 2003-487663P
                          20030715
TC
     ICM A61K000-00
AΒ
     WO2005009356 A UPAB: 20050303
     NOVELTY - Preparation of a controlled release composition (C1) involves
     combining an organic phase (pl) comprising a bioactive agent (al) and a
```

polymer (r1), with an aqueous phase (p2) comprising an organic ion (i1).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for:

- (1) a controlled release composition;
- (2) a process for the production of a microparticle; and
- (3) an improved process for the production of a microparticle. USE - For preparation of a controlled release composition (claimed).

ADVANTAGE - The method produces compositions with a high drug load, minimum burst effect upon administration and minimum degradation of the bioactive agent. The method allows use of water soluble peptides and eliminate need to prepare complexed species in independent steps prior to the preparation of the compositions. Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: A12-V01; B04-B04C; B04-C01; B04-C03; B04-E01; B04-J01; B04-N02; B05-C05; B07-A04; B07-D03; B10-A09A; B10-A09B; B10-A10; B10-C02; B10-C03; B10-C04C; B10-C04E; B10-D03; B10-E04B; B10-E04D; B10-F02; B10-G02; B10-H02F; **B12-M10A**; B12-M11E

TECH

UPTX: 20050303 TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Components: (p1) further comprises a solvent (preferably methylene chloride, ethyl acetate, benzyl alcohol, acetone, acetic acid or propylene carbonate) and a cosolvent (preferably dimethyl sulfoxide, dimethyl formamide, n-methylpyrrolidinone, PEG200, PEG400, methyl alcohol, ethyl alcohol, isopropyl alcohol or benzyl alcohol). (p2) further comprises an emulsifying agent (0.1 - 10 w/w.%)(preferably poly(vinyl alcohol), albumin, lecithin vitamin E-TPGS or polysorbates). (i1) (0.1 - 1000 mM) is selected from carboxylate, sulfate, phosphate, pamoate, dodecylsulfate, trifluoromethyl-p-toluate, dictate, 2-naphthalene sulfonate, 2, 3-naphthalene dicarboxylate, 1-hydroxy -2-naphthoate, 3-hydroxy-2-naphthoate, 2-naphthoate, and salicylsalicylate.

TECHNOLOGY FOCUS - POLYMERS - Preferred Components: (rl) is selected from poly(lactide), poly(glycolide), poly(lactide-co-glycolide), poly (lactic acid), poly(glycolic acid), poly(lactic acid-co-glycolic acid), polycaprolactone, polycarbonate, polyesteramide, polyanhydride, poly(amino acid), polyorthoester, polyacetyl, polycyanoacrylate, polyetherester, poly(dioxanone), poly(alkylene alkylate), copolymer of polyethylene glycol and polyorthoester, biodegradable polyurethanes, blend and their copolymer.

Preferred Components: (a1) is selected from protein, nucleic acid, carbohydrate, peptide, LHRH agonist and their synthetic analog, leuprolide, oxytocin, somatostatin and their synthetic analog, small molecule pharmaceutical substance, immunogen, metabolic precursor capable of promoting growth and survival of cell and tissue, antineoplastic agent, hormone, antihistamine, cardiovascular agent, anti-ulcer agent, bronchodilator, vasodilator, central nervous system agent and narcotic antagonist. The protein or peptide is octreotide, oxytocin, insulin,

leuprolide and their synthetic variation. Preferred Composition: (C1) is microparticles and nanoparticles, which are biodegradable. Preferred Method: (p1) and (p2) are combined using an emulsion process (preferably oil-in-water and water-oil-water).

ABEX UPTX: 20050303

CZ 2003003493

EP 1491236

ADMINISTRATION - (C1) is administered parenterally (including intravenously or intramuscularly), intradermally, pulmonary, buccally, transdermally or transmucosally (including ophthalmically, vaginally, rectally or intranasally).

EXAMPLE - Microparticle formulations were prepared by an oil-in-water emulsion/solvent extraction method. Poly(lactide-co-glycolide) (PLGA) polymer (MW 24,000, 140 - 180 mg) was dissolved in EtOAc (1000 microL). Octreotide acetate (20 - 60 mg) was dissolved in BnOH (1000 microL) and added to the polymer solution yielding a homogenous organic phase. The resulting organic phase was combined with a 1% polyvinylalcohol (PVA) aqueous phase containing disodium pamoate (10 - 50 mM) to provide an emulsion. The emulsion was collected directly into a 0.3% PVA solvent extraction solution (150 ml) and stirred for four hours to extract EtOAc. Hardened microparticles were collected by filtration, washed with water, air dried and stored at 4degreesC. This resulted in a final octreotide/pamoate ratio of approximately 1 - 1.5 in the microparticle formulation. Product with predictable and elevated drug core loads of 5 -17.5% could be formed. The composition had consistent stoichiometry for the molar ratio of bioactive agent to organic ion. The relative production of acylated peptide was lower for microparticles made with the organic ion in the aqueous phase than for microparticles made with the use of preformed octreotide-pamoate or octreotide acetate.

```
L113 ANSWER 2 OF 6 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
AN
     2003-362980 [34]
                        WPIX
DNC
    C2003-095731
TΙ
     Controlled release composition useful for treating prostatic cancer
     comprises an active substance, optionally hydroxynaphthoic
     acid, and a lactic acid polymer.
DC
     A96 B07
IN
     HATA, Y; YAMADA, A; YAMAMOTO, K
PA
     (TAKE) TAKEDA CHEM IND LTD; (TAKE) TAKEDA PHARM CO LTD
     ; (HATA-I) HATA Y; (YAMA-I) YAMADA A; (YAMA-I) YAMAMOTO K
    100
CYC
PΙ
     WO 2003002092
                     A2 20030109 (200334)* EN
                                                 52
                                                       A61K009-00
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            NL OA PT SD SE SL SZ TR TZ UG ZM ZW
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     US 2003134800
                     A1 20030717 (200348)
                                                       A61K038-07
     EP 1330293
                     A2 20030730 (200350)
                                           ΕN
                                                       A61P005-06
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            RO SE SI TR
     JP 2003206240
                     A 20030722 (200351)
                                                 22
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     BR 2002010561
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     KR 2004018402
                     A 20040303 (200443)
                                                       A61K047-34
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     AU 2002311631
                     A1 20030303 (200452)
                                                       A61K009-00
                                                                      <--
     JP 2004238400
                     A 20040826 (200456)
                                                31
                                                       A61K047-12
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ΕN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT

A61K009-22

A61P005-06

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A3 20040818 (200457)

A1 20041229 (200502)

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RO SE SI TR
     CN 1535168
                 A 20041006 (200506)
                                                      A61P005-06
     HU 2004000378
                    A2 20041228 (200506)
                                                      A61K009-16
                                                                     <--
                   A 20050126 (200513)
     ZA 2003009152
                                               116
                                                      A61K000-00
                                                                     <--
     MX 2003011456
                   A1 20040701 (200545)
                                                      A61K009-00
                                                                     <--
     NZ 529969
                    A 20051028 (200581)
                                                      A61K009-16
                                                                     <--
     NO 2003005738
                    A 20040227 (200612)
                                                      A61K047-34
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ADT WO 2003002092 A2 WO 2002-JP6527 20020628; US 2003134800 A1 WO 2002-JP6527
     20020628, US 2002-182731 20020813; EP 1330293 A2 EP 2002-738838 20020628,
     WO 2002-JP6527 20020628; JP 2003206240 A JP 2002-189247 20020628; SK
     2003001560 A3 WO 2002-JP6527 20020628, SK 2003-1560 20020628; BR
     2002010561 A BR 2002-10561 20020628, WO 2002-JP6527 20020628; KR
     2004018402 A KR 2003-717129 20031229; AU 2002311631 A1 AU 2002-311631
     20020628; JP 2004238400 A Div ex JP 2002-189247 20020628, JP 2004-117981
     20040413; CZ 2003003493 A3 WO 2002-JP6527 20020628, CZ 2003-3493 20020628;
     EP 1491236 A1 Div ex EP 2002-738838 20020628, EP 2004-76939 20020628; CN
     1535168 A CN 2002-813061 20020628; HU 2004000378 A2 WO 2002-JP6527
     20020628, HU 2004-378 20020628; ZA 2003009152 A ZA 2003-9152 20031125; MX
     2003011456 A1 WO 2002-JP6527 20020628, MX 2003-11456 20031210; NZ 529969 A
     NZ 2002-529969 20020628, WO 2002-JP6527 20020628; NO 2003005738 A NO
     2003-5738 20031219
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     2003002092; BR 2002010561 A Based on WO 2003002092; AU 2002311631 Al Based
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     Div ex EP 1330293; HU 2004000378 A2 Based on WO 2003002092; MX 2003011456
     Al Based on WO 2003002092; NZ 529969 A Based on WO 2003002092
PRAI JP 2001-340993
                          20011106; JP 2001-199484
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          A61K047-34; A61P005-06
     ICS A61K009-107; A61K009-52; A61K038-00;
         A61K038-04; A61K038-08; A61K038-09;
         A61K038-22; A61K038-24; A61K045-00;
         A61P005-00; A61P005-24; A61P013-08; A61P015-00; A61P015-08;
         A61P015-12; A61P015-18; A61P025-28; A61P035-00; A61P037-00;
          A61P037-04; A61P043-00; C08K005-13; C08L067-04; C08L077-04
ICA
    C07K007-23; C08L101-16
AB
    WO2003002092 A UPAB: 20030529
     NOVELTY - A controlled release composition comprises:
          (i) an active substance or its salts; and
          (ii) a lactic acid polymer or its salts having a weight-average
     molecular weight of 15000 - 50000 in which the content of polymers having
     molecular weights of at most 5000 is at most 5 weight%.
          The composition optionally comprises hydroxynaphthoic
     acid (iii) or its salts.
          DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
          (1) a medicine comprising the control release composition; and
          (2) preparation of the controlled release composition involving
     removing a solvent from a mixed solution of (i), (ii) and optionally
     (iii).
         ACTIVITY - Cytostatic; Gynecological; Antitumor; Nootropic;
     Neuroprotective; Analgesic.
          USE - In a medicine for preventing or curing prostatic cancer,
    prostatic hyperplasia, endometriosis, uterine myoma, uterine fibroma,
    precocious puberty, dysmenorrhea or breast cancer; preventing recurrence
    of breast cancer after the operation for premenopausal breast cancer; and
    as a contraceptive agent (all claimed). For preventing or treating
    hormone-dependent diseases particularly sex hormone-dependent diseases
     (preferably sex hormone-dependant cancers (e.g. pituitary tumor, uterine
```

cancer, etc.), amenorrhea, premenstrual syndrome, multiocular ovary

syndrome; Alzheimer disease, immune deficiency and benign or malignant tumor.

ADVANTAGE - The composition contains the active substance in high content and provides stable releasing speed for long period of time by suppressing the initial excess release. Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: A05-E02; A12-V01; B04-C03C; B04-J07; B10-C03; B10-C04D;

B12-M10; B14-H01B; B14-N14; B14-P01B UPTX: 20030529

TECH

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Method: Preparation of the controlled release composition involving mixing and dispersing an aqueous solution of the active substance or its salts into an organic solvent solution containing hydroxynaphthoic acid or its salts, and a lactic acid polymer or its salts having a weight-average molecular weight of 15000 to 50000 in which the content of polymers having molecular weights of at most 5000 or is at most 5 (wt.%), then, removing the organic solvent. The salt of (i) is with a free base or acid. Preferred Component: (i) is active peptide (preferably LH-RH derivative of formula 5-oxo-Pro-His-Trp-Ser-Tyr-Y-Leu-Arg-Pro-Z (I) or its salt (preferably an acetate salt). (iii) is 3-hydroxy-2-

naphthoic acid or 1-hydroxy-2naphthoic acid.

Y = DLeu, DAla, DTrp, DSer(tBu), D2Nal or DHis(ImBzl); and Z = NH-C2H5 or Gly-NH2.

Preferred Composition: The composition comprises (i) in an amount of 3 -24 (preferably 14 - 24) (w/w.%). The molar ratio of (iii) to (i) is 3:4 -4:3.

TECHNOLOGY FOCUS - POLYMERS - Preferred Component: (ii) has weight-average molecular weight of 15000 - 40000 (preferably 17000 to 26000). A content of polymers having molecular weights of at most 3000 (preferably at most 1000) or is at most 1.5 (preferably at most 0.1) (wt%).

ABEX

UPTX: 20030529

ADMINISTRATION - The composition is administered by injection (claimed). Dosage comprises 0.01 - 10 (preferably 0.05 - 50) mg/kg and administered orally, by injection, muscularly, subcutaneously, permucosally, nasally or rectally.

EXAMPLE - A solution prepared by dissolving DL-lactic acid polymer (144.4 g, weight-average molecular weight 22500) into dichloromethane (111.7 g), and a solution prepared by dissolving 3-hydroxy-2-

naphthoic acid (7.5 g) into dichloromethane (175.1 g)

and ethanol (13.5 g), were mixed and controlled to 28.7 degrees C. The portion of solution (274.4 g) was weighed and mixed with an aqueous solution obtained by dissolving an acetate of 5-oxo-Pro-His-Trp-Ser-Tyr-DLeu-Leu-Arg-Pro-NH-C2H5 (peptide A) (24.89 g) into distilled water (23.47 g) and heated to 54.5 degrees C, and stirred for 5 minutes. The solution was cooled to 15 degrees C and poured into 0.1 (wt/weight%) polyvinyl alcohol (25 1). The emulsion was maintained at 15 degrees C for 30 minutes, stirred for 2 hours and 30 minutes, the resulting microcapsules were precipitated and collected, mannitol (15.4 g) was added and then the solution was freeze-dried to give a powder. The recovered weight of the microcapsule powder was (101.6 g) having the peptide A content of (15.88 %) and 3-hydroxy-2-naphthoic acid content of

(2.82 %). The microcapsule (45 mg) was dispersed in dispersion medium (distilled water containing carboxymethylcellulose (0.15 mg), Polysorbate 80 (0.3 mg) and mannitol (15 mg)) and the dispersion was administered by injection to male SD rat subcutaneously in its back. After administration the rat was sacrificed and peptide A content was quantified and divided by the initial content to give remaining ratio. The remaining ratio (%) of peptide A after 1 day, 1 week, 2 weeks, 4 weeks, 8 weeks, 12 weeks, 20 weeks and 26 weeks was 92.1, 87.4, 78.1, 64.8, 51.5, 38.7, 11.8 and 2 respectively. The results indicated that the microcapsule allowed release of peptide A at a constant speed for a very long period of time.

```
L113 ANSWER 3 OF 6 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
AN
     2003-140138 [13]
                       WPIX
    C2003-035419
DNC
TТ
     New immediate-release pharmaceutical formulation useful e.g. in the
     treatment of cardiac arrhythmias, comprises 9-oxa-3,7-diazabicyclo(3.3.1)
     compounds or their salts, and diluent or carrier.
DC
     A96 B02
IN
     HOVDAL, C; LUNDGREN, A
PA
     (ASTR) ASTRAZENECA AB; (HOVD-I) HOVDAL C; (LUND-I) LUNDGREN A
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                                                      C07D498-08
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                    A 20050324 (200523)
                                                      C07D498-08
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ADT WO 2002083689 A1 WO 2002-SE726 20020412; NO 2003004529 A WO 2002-SE726
     20020412, NO 2003-4529 20031009; EP 1389212 A1 EP 2002-723011 20020412, WO
     2002-SE726 20020412; HU 2003003486 A2 WO 2002-SE726 20020412, HU 2003-3486
     20020412; SK 2003001256 A3 WO 2002-SE726 20020412, SK 2003-1256 20020412;
     BR 2002008828 A BR 2002-8828 20020412, WO 2002-SE726 20020412; KR
     2003088498 A KR 2003-713299 20031010; CZ 2003002774 A3 WO 2002-SE726
     20020412, CZ 2003-2774 20020412; AU 2002253750 A1 AU 2002-253750 20020412;
     CN 1514839 A CN 2002-811636 20020412; MX 2003009209 A1 WO 2002-SE726
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     WO 2002-SE726 20020412; US 2005037067 A1 WO 2002-SE726 20020412, US
     2004-474584 20040311; NZ 528561 A NZ 2002-528561 20020412, WO 2002-SE726
     20020412; ZA 2003007756 A ZA 2003-7756 20031003
FDT EP 1389212 A1 Based on WO 2002083689; HU 2003003486 A2 Based on WO
     2002083689; SK 2003001256 A3 Based on WO 2002083689; BR 2002008828 A Based
     on WO 2002083689; CZ 2003002774 A3 Based on WO 2002083689; AU 2002253750
     Al Based on WO 2002083689; MX 2003009209 Al Based on WO 2002083689; JP
     2005500262 W Based on WO 2002083689; NZ 528561 A Based on WO 2002083689
PRAI SE 2001-1329
                          20010412
TC
    ICM A61K009-10; A61K009-20; A61K031-5386;
         C07D000-00; C07D498-08
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AΒ

FS

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ICS A61K009-08; A61K009-19; A61K009-48;
          A61K047-02; A61K047-10; A61K047-12;
          A61K047-26; A61K047-32; A61K047-34;
          A61K047-36; A61K047-38; A61P009-06
     WO 200283689 A UPAB: 20030224
     NOVELTY - An immediate-release pharmaceutical formulation (I) comprising
     9-oxa-3,7-diazabicyclo(3.3.1) compounds or their salts as active
     ingredient, and diluent or carrier, is new.
          DETAILED DESCRIPTION - An immediate-release pharmaceutical
     formulation (I) comprising 9-oxa-3,7-diazabicyclo(3.3.1) compounds or
     their salts (as active ingredient) selected from 4-((3-(7-(3,3-dimethyl-2-
     oxobutyl)-9-oxa-3,7-diazabicyclo(3.3.1)-non-3-yl)propyl)amino)benzonitrile
     (A), tert-butyl 2-(7-(3-(4-cyanoanilino)propyl)-9-oxa-3,7-
     diazabicyclo(3.3.1)-non-3-yl)ethylcarbamate (B), tert-butyl
     2-(7-(4-(4-cyanophenyl)butyl)-9-oxa-3,7-diazabicyclo(3.3.1)-non-3-
     yl)ethylcarbamate (C), tert-butyl 2-(7-((2S)-3-(4-cyanophenoxy)-2-
     hydroxypropyl)-9-oxa-3,7-diazabicyclo(3.3.1)-non-3-yl)ethylcarbamate (D)
     or their salts, and diluent or carrier, is new.
          An INDEPENDENT CLAIM is also included for a process for the
     preparation of (I) comprising bringing the active ingredient into
     association with the diluent or carrier using wet or dry granulation
     and/or direct compression/compaction process.
          ACTIVITY - Antiarrhythmic; Cardiant; Vasotropic; Anticoagulant;
     Thrombolytic.
          MECHANISM OF ACTION - None given.
          USE - (I) are used in the manufacture of a medicament for the
    prophylaxis or treatment of an arrhythmia e.g. atrial or ventricular
     arrhythmia, atrial fibrillation (e.g. atrial flutter)) (claimed),
     cardiovascular disorder, ischemic heart disease, sudden heart attack,
    myocardial infarction, heart failure, cardiac surgery, or thromboembolic
     events. Also, (I) are useful in foods or pharmaceuticals.
          ADVANTAGE - (I) can be administered directly. (I) is stable during
     storage and easy to administer. (I) releases the active ingredient in an
     amount of at least 70 (preferably at least 80)% within 4 (preferably
    within 1) hour(s) or within 30 minutes.
    Dwg.0/22
    CPI
FΑ
    AB; DCN
    CPI: A12-V01; B04-C02A; B04-C02B; B04-C03A; B04-C03C; B05-A01B; B05-B02A3;
          B05-B02C; B05-C04; B06-E03; B06-E05; B07-A02B; B10-A07; B10-C02;
          B10-C04; B10-C04D; B10-E04C; B11-C09; B12-M05; B12-M06; B12-M09;
          B12-M10C; B14-F01; B14-F02; B14-F02D; B14-F04
TECH
                    UPTX: 20030224
    TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Formulation: (I) is in the
    form of an immediate release tablet comprising the active ingredient,
    diluent, carrier and optionally at least one additional excipient
     (preferably lubricant, glidant, binder and/or disintegrant).
     (I) contains (w/w.%) diluent/carrier (up to 40, preferably up to 30,
    especially up to 20, particularly up to 10), excipient (up to 5,
    preferably up to 10).
    When (I) comprises (A) either as the free base, para-toluenesulfonic acid
    salt, or benzene sulfonic acid salt and an aqueous carrier along with
    ethanol as sole additional excipient, then the ethanol is present in an
    amount of not more than 10 w/w.% of the content of carrier.
    (I) is in the form of an aqueous solution.
    The solubility of the active ingredient in the aqueous solution is at
    least 1 (preferably at least 2) mg/ml.
     (I) can be provided in the form of a concentrate.
    The concentrate is used for preparation of the formulation by adding
    further diluent or carrier prior to administration.
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(I) can be a solid or a freeze-dried pharmaceutical composition. Preferred Method: The diluent or carrier is added to a mixture of a acid and base.

The process further involves removal of diluent or carrier, by concentrating (preferably evaporating under reduced pressure) the resultant formulation.

The diluent or carrier is removed by evaporation (under reduced pressure), spray drying or freeze-drying.

Preferred Components: The excipient also comprises antimicrobial preservatives, tonicity modifiers, pH adjusting agents, pH controlling agents, surfactants, cosolvents and/or antioxidants. The active ingredient is water-soluble.

TECHNOLOGY FOCUS - POLYMERS - Preferred Components: The diluent or carrier is an aqueous carrier.

The diluent or carrier is microcrystalline cellulose or silicified microcrystalline cellulose (preferably microcrystalline cellulose). The binder is polyvinylpyrrolidone, microcrystalline cellulose, polyethylene glycol, polyethylene oxide, hydroxypropylmethylcellulose of a low molecular weight, a methylenecellulose of a low molecular weight, hydroxypropylcellulose of a low molecular weight, hydroxypropylcellulose of a low molecular weight or sodium carboxymethyl cellulose of a low molecular weight (preferably polyvinyl pyrrolidone or hydroxypropylmethylcellulose of a low molecular weight). The disintegrant is sodium starch glycolate, crosslinked polyvinylpyrrolidone, crosslinked carboxymethyl cellulose or an alginate (preferably sodium starch glycolate, crosslinked polyvinylpyrrolidone or crosslinked sodium carboxymethyl cellulose).

TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Components: The tonicity modifier is sodium chloride, mannitol or glucose (preferably mannitol). The pH controlling agent is tartaric acid, acetic acid or citric acid. The diluent or carrier is lactose, mannitol, sorbitol, maize starch, potato starch, rice starch or glucose.

The binder and disintegrant is maize starch, potato starch or rice starch. The cosolvent is ethanol, polyethylene glycol or hydroxypropyl-beta-cyclodextrin.

TECHNOLOGY FOCUS - INORGANIC CHEMISTRY - Preferred Components: The lubricant is magnesium stearate, stearic acid, calcium stearate, stearyl alcohol or sodium stearyl fumarate (preferably magnesium stearate or sodium stearyl fumarate).

The lubricant is talc or colloidal silica.

The pH adjusting agent is HCl or NaOH.

The diluent or carrier is monobasic calcium phosphate, dibasic calcium phosphate (dihydrate or anhydrate), tribasic calcium phosphate, calcium lactate or calcium carbonate (preferably diabasic calcium phosphate (dihydrate or anhydrate)).

ABEX UPTX: 20030224

SPECIFIC COMPOUNDS - 1-Hydroxy-2-naphthoic

acid, hydroxybenzenesulfonic acid, benzenesulfonic acid, toluene-sulfonic acid, naphthalene sulfonic acid, naphthalenedisulfonic acid, mesitylene-sulfonic acid, methane sulfonic acid, tartaric acid, succinic acid, citric acid, acetic acid, hippuric acid, benzoic acid, hydrochloric acid and hydrobromic acid are specifically claimed as the salts of (A).

Lysine monohydrochloride, pamoic acid, terephthalic acid, methanesulfonic acid, tartaric acid, succinic acid, citric acid, acetic acid, hippuric acid, benzoic acid, hydrochloric acid or hydrobromic acid are specifically claimed as the salts of (D).

Methanesulfonic acid, tartaric acid, succinic acid, citric acid, acetic

acid, hippuric acid, hydrochloric acid and hydrobromic acid are specifically claimed as the salts of (B) and (C) respectively.

ADMINISTRATION - (I) is administered perorally in the form a tablet, capsule, or liquid dosage form, parenterally (including subcutaneously, intravenously, intraarterially, transdermally, intranasally, intrabuccally, intracutaneously, intramuscularly, intralipomateously, intraperitoneally) rectally or sublingually, topically or by inhalation (claimed) in a dosage of 10 - 2000 (preferably 50 - 1000) mg.

EXAMPLE - An aqueous formulation was prepared by dissolving 4-((3-(7-(3,3-dimethyl-2-oxobutyl)-9-oxa-3,7-diazabicyclo(3.3.1)-non-3-yl) propyl) amino) benzonitrile (A; 60 micromol) in tartaric acid (60 micromol), water was added to about 90% of the final volume. The pH was checked and adjusted to 4 by addition of aqueous sodium hydroxide (q.s). The water (1 ml) was added to the final volume. The composition was orally administered to rats in a 14 day toxicity study at a dosage of 420 micromol/kg, and obtaining a plasma concentration of 5.4 - 8.4 microM after 1 hour.

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after 1 hour.
L113 ANSWER 4 OF 6 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
ΑN
     2003-058393 [05]
                        WPIX
DNC
    C2003-014888
TI
    Medicinal solution comprises nonpeptidic active agent, organic acid and
    biocompatible organic solvent.
DC
    A96 B05
ΙN
    AKIYAMA, Y; MATSUMOTO, Y; YAMAGATA, Y
PA
     (TAKE) TAKEDA CHEM IND LTD; (AKIY-I) AKIYAMA Y; (MATS-I)
    MATSUMOTO Y; (YAMA-I) YAMAGATA Y
CYC
    100
PΙ
    WO 2002078669
                     A1 20021010 (200305)* JA
                                                91
                                                      A61K009-08
        RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
            NL OA PT SD SE SL SZ TR TZ UG ZM ZW
         W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
            DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ
            LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO
            RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
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                                                      A61K009-08
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            RO SE SI TR
    AU 2002243003
                     A1 20021015 (200432)
                                                      A61K009-08
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    US 2004116522
                     A1 20040617 (200440)
                                                      A61K031-205
ADT WO 2002078669 A1 WO 2002-JP3145 20020329; JP 2002356446 A JP 2002-94496
    20020329; EP 1374855 A1 EP 2002-708717 20020329, WO 2002-JP3145 20020329;
    AU 2002243003 A1 AU 2002-243003 20020329; US 2004116522 A1 WO 2002-JP3145
    20020329, US 2003-473189 20030925
FDT EP 1374855 Al Based on WO 2002078669; AU 2002243003 Al Based on WO
     2002078669
PRAI JP 2001-99578
                          20010330
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IC ICM A61K009-08; A61K031-205; A61K047-12 ICS A61K009-48; A61K047-20; A61K047-34

WO 200278669 A UPAB: 20030121

NOVELTY - Medicinal solutions comprise a nonpeptidic active agent, an organic acid and a biocompatible organic solvent.

ACTIVITY - None given.

MECHANISM OF ACTION - Gonadotropin releasing hormone agonist; Somatostatin receptor agonist.

USE - As solutions for administering non-peptidic pharmaceuticals such as gonadotropin releasing hormone agonists and somatostatin receptor

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agonists.
          ADVANTAGE - Active substance is dissolved at high concentrations and
     have good bioavailability.
     Dwq.0/0
FS
     CPI
FA
     AB; DCN
MC
     CPI: A12-V01; B04-C03C; B06-F03; B10-A10; B10-C03; B10-C04D; B12-M07
TECH
                    UPTX: 20030121
     TECHNOLOGY FOCUS - ORGANIC CHEMISTRY - Preferred Solution: Solution
     comprises (a) at least 5 weight% nonpeptidic active agent having a
     molecular weight of less than 1000; (b) 1-40 weight% lower aliphatic acid,
     aliphatic hydroxycarboxylic acid (preferably lactic acid) or aromatic
     organic acid (preferably salicylic acid, 1-hydroxy-2-
     naphthoic acid or 3-hydroxy-2-
     naphthoic acid); and (c) polyethylene glycol or its
     aliphatic acid ester or dimethylsulfoxide. Composition is formulated for
     non-oral (preferably injection) or oral use.
ABEX
                    UPTX: 20030121
     EXAMPLE - A medicinal solution comprised 5-(N-benzyl-N-methylaminomethyl)-
     1-(2,6-difluorobenzyl)-6-(4-(3-methoxyureido)phenyl)-3-phenylthieno(2,3-
     d)pyrimidine-2,4 (1H,3H)-dione (I) (1200 mg), salicylic acid (372.6 mg)
     and dimethylsulfoxide (2 ml). The solution (200 mul) was administered
     subcutaneously to SD rats and gave blood (I) concentrations of 6.0, 19.9,
     12.0, and 9.0 ng/ml after 2, 7, 14 and 21 hours respectively.
L113 ANSWER 5 OF 6 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN
AN
     2001-168445 [17]
                        WPIX
DNC
     C2001-050282
ΤI
     Sustained release composition e.g. for peptides comprises active
     substance, hydroxynaphthoic acid and lactic
     acid-glycolic acid polymer.
DC
     A96 B07
IN
     HATA, Y; IGARI, Y; YAMAMOTO, K
PA
     (TAKE) TAKEDA CHEM IND LTD
CYC
PΙ
     WO 2001005380
                     A1 20010125 (200117)* JA
                                                 49
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            HR HU ID IL IN IS JP KG KR KZ LC LK LR LT LV MA MD MG MK MN MX MZ
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    WO 2001005380 A1 WO 2000-JP4683 20000713; JP 2001081043 A JP 2000-217251
     20000713; AU 2000058530 A AU 2000-58530 20000713; CZ 2002000114 A3 WO
     2000-JP4683 20000713, CZ 2002-114 20000713; NO 2002000084 A WO 2000-JP4683
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20000713, NO 2002-84 20020108; EP 1197208 A1 EP 2000-944418 20000713, WO
     2000-JP4683 20000713; BR 2000012400 A BR 2000-12400 20000713, WO
     2000-JP4683 20000713; SK 2002000034 A3 WO 2000-JP4683 20000713, SK 2002-34
     20000713; KR 2002012312 A KR 2002-700546 20020114; CN 1361685 A CN
     2000-810405 20000713; JP 2001510437 X WO 2000-JP4683 20000713, JP
     2001-510437 20000713; HU 2002002880 A2 WO 2000-JP4683 20000713, HU
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     2000-JP4683 20000713, MX 2002-461 20020114
FDT AU 2000058530 A Based on WO 2001005380; CZ 2002000114 A3 Based on WO
     2001005380; EP 1197208 A1 Based on WO 2001005380; BR 2000012400 A Based on
     WO 2001005380; SK 2002000034 A3 Based on WO 2001005380; JP 2001510437 X
     Based on WO 2001005380; HU 2002002880 A2 Based on WO 2001005380; NZ 516466
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PRAI JP 1999-201887
                          19990715
TC
    ICM A61K000-00; A61K009-52; A61K038-09;
          A61K038-22; A61K047-34
     ICS
         A61K038-00; A61K047-12; A61P005-02; A61P005-24;
          A61P013-08; A61P015-00; A61P015-18; A61P035-00
AΒ
    WO 200105380 A UPAB: 20010328
     NOVELTY - Sustained release composition comprises:
          (a) physiologically active substance;
          (b) hydroxynaphthoic acid; and
          (c) a lactic acid-glycolic acid polymer.
          DETAILED DESCRIPTION - Sustained release composition comprises:
          (a) physiologically active substance or its salt;
          (b) hydroxynaphthoic acid or its salt; and
          (c) a lactic acid-qlycolic acid polymer or its salt having a
     weight-average molecular weight by the amount (micro mol) of the terminal
     carboxyl group per unit mass (g) of the lactic acid-glycolic acid polymer
     of 1200000-3000000.
          ACTIVITY - Cytostatic;
          USE - As a sustained release composition especially an injection for
     peptides such as luteinizing hormone releasing hormone (LH-RH) compounds
     for treating and preventing e.g. prostate cancer, prostatic hypertrophy,
     uterine cancer, myometrium cancer, pubescent disturbances, uterine
     fibrosarcoma, and breast cancer.
          ADVANTAGE - Gives sustained release over a long period of time e.g.
     several months.
     Dwg.0/0
FS
     CPI
FA
    AB; DCN
MC
     CPI: A05-E02; A12-V01; B04-C01B; B04-C03D; B04-J07; B10-C04A;
          B12-M10A; B14-H01; B14-N14
TECH
                    UPTX: 20010328
     TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Composition: Composition
     comprises:
     (i) a peptide or a luteinizing hormone releasing hormone (LH-RH) compound
     (preferably of formula 5-oxo-Pro-His-Trp-Ser-Tyr-Y-Leu-Arg-Pro-Z (I);
     (ii) 3-hydroxy-2-naphthoic acid or
     preferably 1-hydroxy-2-naphthoic acid; and
     (iii) lactic acid-glycolic acid polymer having a mol ratio of 100/0-40/60
     (preferably 100/0) % and a weight-average molecular weight of 3000-100000
     (preferably 20000-50000).
     Y = DLeu, DAla, DTrp, DSer(tBu), D2Nal or DHis(ImBzl); and
     Z = NHEt or Gly-NH2.
ABEX
                    UPTX: 20010328
    ADMINISTRATION - Dosage is 0.01-10 (preferably 0.05-5) mg/kg/day a.i.
     EXAMPLE - 5-Oxo-Pro-His-Trp-Ser-Tyr-DLeu-Leu-Arg-Pro-NHEt (Ia) (1.2 g) in
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water (1.2 ml) and DL-lactose polymer (molecular weight 40600; terminal

acid (0.18 g) in dichloromethane (8.25 ml) and ethanol (0.45 ml) were homogenized to give a water in oil emulsion. The emulsion was

carboxy groups 52.7 mu mol/g) and 1-hydroxy-2-naphthoic

homogenized with 0.1 % (w/w) polyvinyl alcohol in water (1200 ml) at 7000 rpm for 3 hours to give a water-in oil-in water emulsion. The emulsion was used to prepare a macrogel containing 18.7 % (Ia). A solution containing the macrogel (45 mg) was injected into SD rats and the % (Ia) remaining after 1 day, 2 weeks, 8 weeks, 16 weeks and 26 weeks was 92.9, 74.6, 31.6, 24.5 and 12.6 % respectively. L113 ANSWER 6 OF 6 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN 1999-444329 [37] ΑN WPIX DNC C1999-130900 ΤI Slow-release composition, especially containing luteinising hormone release hormone for treating breast, prostate or uterine cancer, as a contraceptive etc.. DC A23 A35 A96 B04 B07 P81 IN HATA, Y; IGARI, Y; SAIKAWA, A; YAMAMOTO, K PA (TAKE) TAKEDA CHEM IND LTD; (HATA-I) HATA Y; (IGAR-I) IGARI Y; (SAIK-I) SAIKAWA A; (YAMA-I) YAMAMOTO K CYC 84 PΙ WO 9936099 A1 19990722 (199937) * JA 57 A61K047-30 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW W: AL AM AU AZ BA BB BG BR BY CA CN CU CZ EE GD GE HR HU ID IL IN IS JP KE KG KR KZ LC LK LR LT LV MD MG MK MN MX NO NZ PL RO RU SG SI SK SL TJ TM TR TT UA US UZ VN YU JP 11269094 A 19991005 (199953) 20 A61K047-12 AU 9918897 A 19990802 (199954) EP 1048301 A1 20001102 (200056) ENA61K047-30 R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE NO 2000003530 A 20000914 (200058) A61K047-12 <--CZ 2000002470 A3 20001011 (200060) A61K047-30 <--BR 9906903 A 20001212 (200102) A61K038-24 <--SK 2000001027 A3 20010118 (200108) A61K047-30 <---CN 1288387 A 20010321 (200137) A61K047-30 <--HU 2001000221 A2 20010628 (200143) A61K047-30 <--KR 2001033949 A 20010425 (200164) A61K038-24 <--MX 2000006641 A1 20010201 (200168) A61K037-02 <--JP 2000539871 X 20020924 (200278) A61K047-30 <--AU 758596 B 20030327 (200330) A61K047-30 <--NZ 505651 A 20030829 (200365) A61K047-30 <--US 6740634 B1 20040525 (200435) A61K038-00 <--RU 2230550 C2 20040620 (200446) A61K009-22 <--US 2005025826 A1 20050203 (200511) A61K009-00 <--IN 2000000096 P2 20050318 (200575) EN A61K047-30 <--ADT WO 9936099 A1 WO 1999-JP86 19990113; JP 11269094 A JP 1999-7566 19990114; AU 9918897 A AU 1999-18897 19990113; EP 1048301 A1 EP 1999-900300 19990113, WO 1999-JP86 19990113; NO 2000003530 A WO 1999-JP86 19990113, NO 2000-3530 20000707; CZ 2000002470 A3 WO 1999-JP86 19990113, CZ 2000-2470 19990113; BR 9906903 A BR 1999-6903 19990113, WO 1999-JP86 19990113; SK 2000001027 A3 WO 1999-JP86 19990113, SK 2000-1027 19990113; CN 1288387 A CN 1999-802114 19990113; HU 2001000221 A2 WO 1999-JP86 19990113, HU 2001-221 19990113; KR 2001033949 A KR 2000-707533 20000707; MX 2000006641 A1 MX 2000-6641 20000705; JP 2000539871 X WO 1999-JP86 19990113, JP 2000-539871 19990113; AU 758596 B AU 1999-18897 19990113; NZ 505651 A NZ 1999-505651 19990113, WO 1999-JP86 19990113; US 6740634 B1 WO 1999-JP86 19990113, US 2000-582926 20000706; RU 2230550 C2 WO 1999-JP86 19990113, RU 2000-121545 19990113; US 2005025826 A1 Div ex WO 1999-JP86 19990113, Div

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ex US 2000-582926 20000705, US 2004-799320 20040312; IN 2000000096 P2 WO
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         A61K009-50; A61K009-52; A61K031-00;
          A61K031-19; A61K038-09; A61K038-22;
          A61P005-06; A61P013-08; A61P015-00; A61P035-00; A61P039-00;
          G02F001-35
AB
          9936099 A UPAB: 20011203
     NOVELTY - A slow-release composition comprises a physiologically active
     material or its salt, a hydroxynaphthoic acid or its
     salt and a biodegradable polymer or its salt.
          USE - The composition containing LH-RH derivative is useful as a
     contraceptive or for preventing and treating prostate cancer, prostate
     hypertrophy, endometriosis, fibroids or myoma of the uterus, menstrual
     difficulties or breast cancer (claimed), polycystic ovary, cancer of the
     hypophysis or amennorhoea, in humans and other animals.
          ADVANTAGE - The composition has low toxicity.
     Dwg.0/0
FS
     CPI GMPI
FΑ
     AB; DCN
     CPI: A05-E02; A09-A07; A12-V; A12-V01; B04-C03D; B04-J07; B10-C03;
MC
          B10-C04D; B12-M10A; B12-M11E
TECH
                    UPTX: 19990914
     TECHNOLOGY FOCUS - POLYMERS - The polymer is a polymer of an
     alpha-hydroxyacid, especially lactic acid-glycollic acid.
     TECHNOLOGY FOCUS - PHARMACEUTICALS - The active material is a peptide,
     especially an LH-RH derivative.
ABEX
                    UPTX: 19990914
     SPECIFIC COMPOUNDS - The acid is 3-hydroxy-2-naphthoic
     acid.
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ADMINSTRATION - Dosage is 0.05-50~mg/kg of active component every 1-6 months in humans. Administration is orally, i.m., s.c., through the mucous membrane of the target organ etc.

EXAMPLE - N-(S)-tetrahydrofur-2-oyl-Gly-D2Nal-D4ClPhe-D3Pal-Ser-NMeTyr-DLys(Nic)-Leu-Lys(Nisp)-Pro-DAlaNH2 (peptide A) acetate (1800mg), 3-hydroxy-2-naphthoic acid (173 mg) and lactate-glycollate copolymer (2g) (lactate/glycollate 50/50 mole %, of Mw 10100, Mn 5670, 268.8 micromole/g carboxy) were dissolved in ethanol (2 ml) and CH2Cl2 (6 ml), introduced at 18 degreesC into 0.1 % (w/w) polyvinyl alcohol solution (900 ml) containing 5% mannitol, and formed into an emulsion by stirring at 7000 rpm. The emulsion was stirred to allow the organic solvents to escape (or dispersed in water). The oil phase was solidified and sieved (75 micron mesh) then centrifuged to collect the microcapsules. These were suspended in water, re-centrifuged, dispersed in mannitol (250 mg) and a small amount of water, and freeze dried. The recovery rate of material in microcapsules, apart from the mannitol, was 76 %, content of peptide A was 34.7 %, and ratio of the naphthoic acid to peptide was 1.19. These microcapsules were suspended in

water containing carboxymethyl cellulose, polysorbate 80 and mannitol as suspending agents, and injected subcutaneously into the back of rats. The amount of peptide remaining was 70 % after the first day, 31 % after the first week and 9 % after the third week.

=> => d his

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SET COST OFF
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FILE 'HCAPLUS' ENTERED AT 06:52:08 ON 14 MAR 2006
L1
              1 S (WO2000-JP4683 OR JP99-201887)/AP, PRN
                E IGARI/AU
L2
             81 S E77, E78
                E YASUTAKA/AU
                E HATA/AU
                E HATA Y/AU
L3
             92 S E3, E4, E40
                E YOSHIO/AU
              7 S E3, E17
1.4
                E YAMAMOTO/AU
              5 S E3
1.5
                E YAMAMOTO K/AU
           1597 S E3-E8, E143, E144, E145
1.6
                E KAZUMICHI/AU
                E TAKEDA/PA, CS
L7
          14786 S TAKEDA?/PA,CS
                SEL RN L1
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L8
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L9
              3 S L8 AND C6-C6/ES
                E C11H8O3/MF
L10
             95 S E3 AND C6-C6/ES AND 2/NR
L11
             69 S L10 AND HYDROXY
L12
             25 S L11 AND ACID
L13
             19 S L12 NOT (LABELED OR (D OR T)/ELS OR 11C# OR 13C# OR 14C# OR C
L14
             19 S L9, L13
L15
              1 S L8 AND PMS/CI
L16
              3 S (D-LACTIC ACID OR DL-LACTIC ACID OR L-LACTIC ACID)/CN
L17
              7 S C6H8O4/MF AND OC2OC2/ES AND 2 5 DIONE AND 3 6 DIMETHYL
L18
              5 S L17 NOT D/ELS
L19
              8 S L16, L18
L20
              1 S GLYCOLIC ACID/CN
L21
              1 S C4H4O4/MF AND OC2OC2/ES AND 2 5 DIONE
L22
              2 S L20, L21
                SEL RN
L23
           2844 S E1-E2/CRN
                SEL RN L19
L24
           5207 S E3-E10/CRN
L25
            486 S L23 AND L24
L26
             17 S L25 AND 2/NC
L27
             38 S L25 AND SALT
L28
             12 S L27 AND 2/NR
L29
              7 S L28 AND NA
L30
              1 S L29 AND 3/NC
L31
             18 S L26, L30
L32
             26 S L27 NOT L28
L33
              2 S L32 AND 1/NR
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L34
              24 S L32 NOT L33
L35
              13 S L34 AND NR>=1
L36
              11 S L34 NOT L35
L37
               8 S L36 NOT UNSPECIFIED
L38
               7 S L37 AND 3/NC
              25 S L31, L38
L39
                 SEL RN L14
L40
             716 S E11-E29/CRN
L41
             217 S L40 NOT (MXS OR PMS)/CI
L42
            81 S L41 NOT COMPD
L43
              66 S L42 AND 2/NR
L44
              63 S L43 NOT CONJUGATE
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L45
              82 S L14, L44
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L46
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L47
            3399 S HYDROXY(1W)NAPHTHOIC ACID
L48
              36 S CARBOXY (1W) NAPHTHOL
L49
            2584 S HYDROXYNAPHTHOIC ACID
.L50
             269 S HYDROXY(1W)NAPHTHALENECARBOXYLIC ACID
L51
              11 S HYDROXY(1W)NAPHTHALENE CARBOXYLIC ACID
L52
             656 S HYDROXY (1W) NAPHTHOATE
L53
             332 S HYDROXYNAPHTHALENE(1W)CARBOXYLIC ACID
L54
            6953 S L45-L53
L55
            6097 S L39
L56
            8320 S (LACTIDE OR LACTIC OR POLYLACTI?) (S) (GLYCOLIDE OR GLYCOLIC OR
L57
             108 S RESOMER() (RG502H OR RG858 OR RG 858 OR RG 502H OR RG 502 H)
L58
              69 S POLYGLACTIN 910
L59
             600 S POLYLACTIDE ?GLYCOLIDE
L60
             138 S POLYGLACTIN
L61
             161 S ATRIGEL OR VICRYL
L62
            . 73 S RESOMER() (RG502 OR RG 502)
L63
             468 S RESOMER
            8924 S L55-L63
L64
L65
               9 S L54 AND L64
L66
               5 S L65 AND (PHARMACEUT? OR PHARMACOL?)/SC,SX
L67
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L68
            4559 S L55(L) (THU OR DMA OR PKT OR PAC OR BAC OR FFD OR COS OR DGN)/
L69
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               5 S L66, L69
L70
L71
               4 S L65 NOT L70
L72
               3 S L1-L7 AND L65
L73
               5 S L70, L72
                 SEL HIT RN L73
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L74
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L75
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L76
               2 S L74 AND L39
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     FILE 'WPIX' ENTERED AT 07:19:19 ON 14 MAR 2006
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L77

1232 S L47-L53

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L79
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L80
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               1 S R09404/SDCN
L81
L82
               1 S R09405/SDCN
                 E C11H8O3/MF
                 E C11 H8 O3/MF
L83
              22 S E3
                 SEL SDCN 6 14 15 18 22
                 EDIT /SDCN /DCN
             116 S E1-E5
L84
                 SEL DCSE L83 6 14 15 18 22
                 EDIT E6-E10 /DCSE /DCRE
L85
              96 S E6-E10
L86
            1304 S L77, L84, L85 OR L83/DCR
                 E LACTIC ACID/CN
L87
             18 S E3-E17, E20, E21, E23
              18 S L79, L87
L88
                 SEL SDCN
                 EDIT /SDCN /DCN
           5350 S E1-E20
L89
                 SEL DCSE L88
                 EDIT E21-E38 /DCSE /DCRE
L90
           3122 S E21-E38
           5355 S L89,L90
L91
                E GLYCOLIC ACID/CN
L92
               5 S E3-E6, E9
                 SEL SDCN
                EDIT /SDCN /DCN
L93
           2240 S E1-E6
           2577 S 0448/DRN
L94
                 SEL DCSE L92
                EDIT E7-E11 /DCSE /DCRE
L95
           1304 S E7-E11
L96
           2902 S L93-L95
L97
              3 S L86 AND L91 AND L96
                E POLYLACT/CN
               2 S E4,E5
L98
                E POLYGLYCOL/CN
L99
              2 S E4-E6
L100
               4 S L98, L99
                SEL SDCN
                EDIT /SDCN /DCN
L101
           6132 S E1-E6
           7708 S 0009/DRN
L102
                SEL DCSE L100
                EDIT /DCSE /DCRE E7-E10 /DCSE /DCRE
L103
           3975 S E7-E10
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L104
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L105
             10 S L105 AND A61K/IPC
L106
L107
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L109
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L110
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L111
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L112
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L113
              6 S L107, L109-L112
L114
              4 S L106 NOT L113
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